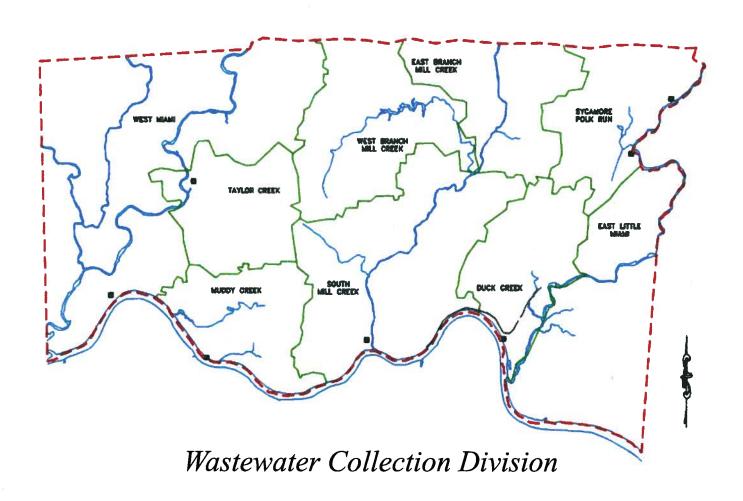
US ERA ARCHIVE DOCUMENT

EXHIBIT 6

Metropolitan Sewer District of Greater Cincinnati

SEWER OVERFLOW RESPONSE PLAN







SEWER OVERFLOW RESPONSE PLAN

DECEMBER 1999 (REVISED February 2002)

Prepared for

The Metropolitan Sewer District

of

Greater Cincinnati

SEWER OVERFLOW RESPONSE PLAN TABLE OF CONTENTS

December 1999 (Revised February 2002)

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1.0 INTRODUCTION

Purpose, Objectives And Goals

A Sewer Overflow Response Plan (SORP) is an operational document that describes procedures to be taken by the Metropolitan Sewer District of Greater Cincinnati (MSD) in response to sewer overflows within its separate or combined sanitary sewer systems. It is designed to ensure that every report of a sewer overflow is dispatched to the appropriate crews for response, and that appropriate response actions are taken to address each overflow. This plan is primarily intended to address response to dry-weather sewer overflows from any point in either the combined or separate sewer system, and to address wet weather sewer overflows from any point in either the combined or separate sewer system, except at "Enumerated SSO Locations" and permitted CSO discharge points.. **NO** WIB SSOs are included in this Plan.

There are two types of wet weather and/or capacity-related SSO discharges: 1) SSO discharges from "Enumerated SSO Locations" ("Enumerated SSO Locations" have been identified to Ohio EPA as chronic Capacity-Related SSO discharges, which are monitored and reported in accordance with the 1992 Ohio EPA DFFO), 2) SSO discharges from a "Non-Enumerated SSO Location." The latter are generally caused by higher than normal rainfall and/or higher than normal

ground water condition, or a flow restriction due to an isolated sewer pipe failure. During a wet weather and/or capacity-related discharge, the sewer system may be surcharged and therefore may not have capacity to return the overflow to the sewer system. In many cases the SSO discharge point is a rain-swollen creek or a direct-connection to a storm sewer.

A wet weather, capacity related SSO discharge response may be different than a dry weather SSO discharge response, or the response to a wet weather SSO caused by a localized pipe failure or blockage. The SORP response to a wet weather, capacity-related SSO discharge from a "Non-Enumerated SSO Location" would be generally limited to: 1) field verifying the initial report of a SSO discharge; 2) determination that the SSO is the result of a sewer system overload from storm water entry, and/or high ground water; 3) make field inspections of the location at 24 hour intervals until the SSO ceases; 4) cleanup discharge debris from locations of normal public access after the storm water runoff flow has receded; 5) any identified pipe repairs will be initiated as soon as site and sewer conditions allow reasonable work conditions; and 6) the site will be referred to Engineering for further investigation and possible capital improvements to address the capacity limitation.

Where not precluded by surcharge, high flow or drainage course flooding conditions, the response to wet weather capacity related and localized blockage caused SSOs will be the same as to that for dry weather SSOs.

A Sewer Overflow Response Plan (SORP) emphasizes emergency response activities to contain, mitigate and clean-up residuals from the sewer overflow. In addition, the SORP emphasizes procedures to accurately report and document overflows, notify agencies and take other actions as appropriate.

The primary objectives of the SORP are to:

- · Protect public health and the environment,
- Satisfy regulatory agencies and discharge permit conditions which address procedures for managing sewer overflows, and
- Minimize risk of enforcement actions against MSD.

Other objectives of the SORP include:

- Protecting private and public property,
- Protecting MSD personnel;
- Protecting all MSD owned facilities, and
- Providing good customer service.

The SORP is intended to supplement and be consistent with existing emergency plans and standard operating procedures. Many of the procedures followed by the WWC Division are outlined in the Wastewater Collection Division Training Manual, which was prepared in 1992.

In order to achieve this objective, the following goals were identified:

- Necessary communications including who will be notified in what order,
- A means to gauge the level of potential impact promptly so as to dispatch the proper resources without delay, and
- Actions to be taken by MSD and what actions will be undertaken by emergency contractors.

It should be stated at the outset that the WWC Division response to sewer problems received as "Request for Service" calls is very quick. Each problem is diagnosed within several hours and the resolution is determined on a case-by-case basis. It is difficult to document each possible response that will be or has been undertaken by the WWC Division. Overall, they will "do whatever it takes" to resolve a problem which is under their domain. Many of the statements outlined in this report are taken from experienced individuals who exercise energy, creativity and skill on a daily basis to resolve "Request for Service" calls.

Updating and Maintenance of the SORP

It is recommended that MSD update the SORP on an as-needed basis to reflect revisions to the NPDES permit and new initiatives that are being undertaken by the WWC Division.

This plan will be subject to modification by the Director of MSD to account for changes in circumstances such as changes in the configuration of MSD facilities, the purchase of new equipment, changes in regulatory requirements, the development of new technologies, or changes in industry standards/best management practices. MSD shall report any such modifications to this Plan in the annual report required by Paragraph IX.C of the Consent Decree.

2.0 FACTORS THAT INFLUENCE OVERFLOW RESPONSE

The sewer system covers approximately 414 square miles and serves a residential population in excess of 800,000 including industries. MSD operates and maintains over 3,150 miles of sanitary and combined sewers, 6 major wastewater treatment plants, numerous package treatment plants, package lift stations, and major pumping stations.

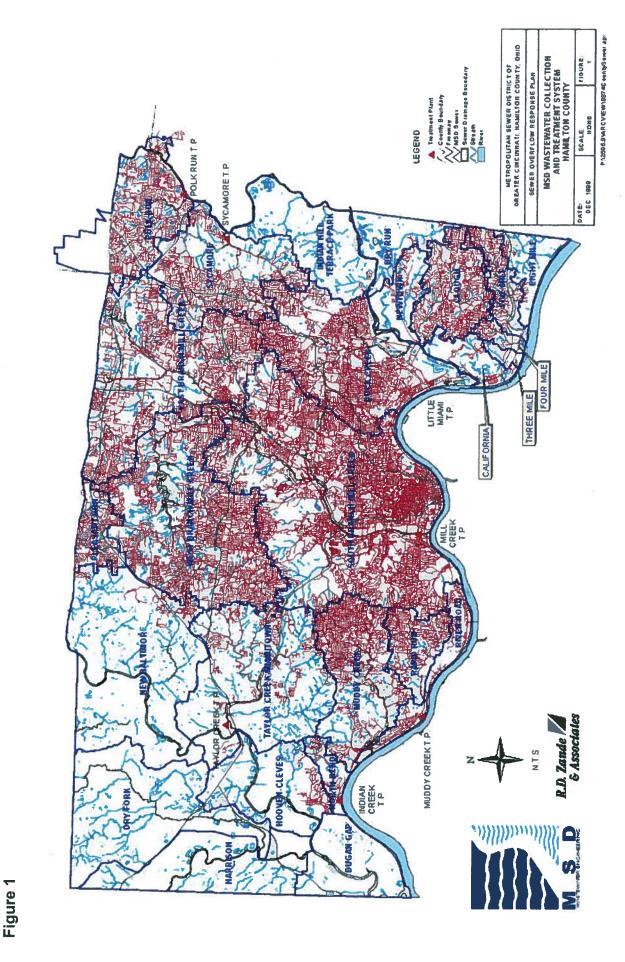
Figure 1 depicts the MSD service area.

The MSD service area is served by sanitary and combined sewers. In general, sanitary sewers serve the newer and more outlying portions of the service area. Combined sewers exist primarily in the older and downtown areas and serve portions of the Duck Creek, Mill Creek, Muddy Creek, Rapid Run, and River Road drainage areas.

Overflow Locations

Sewer overflows will typically occur more frequently at or near the following locations:

- Sanitary Sewer Overflow (SSO) structures,
- Combined Sewer Overflow (CSO) structures,
- Pump stations,



- Through tops of manholes, and
- Basements.

Lists of SSO structures and CSO control structure are provided in Appendices A and B respectively.

Types of Overflows

The location and situations under which sewer overflows occur dictates the type of response taken. Table 1 summarizes types of overflows and the required response.

TABLE 1

SEWER OVERFLOW TYPE AND THE REQUIRED RESPONSE

THE REQUIRED RESPONSE								
Type of Sewer	Weather Condition	Overflow Response Required	Overflow Monitoring	Comments				
Separate Sanitary (non-enumerated)	Dry	Yes	No	Although no specific overflow monitoring would be performed, MSD will monitor these areas for chronic problems.				
Separate Sanitary (non-enumerated)	Wet	Yes	No	Although no specific overflow monitoring would be performed, MSD will monitor these areas for chronic problems.				
Separate Sanitary (enumerated)	Dry	Yes	No	Although no specific overflow monitoring would be performed, MSD will monitor these areas for chronic problems.				
Separate Sanitary (enumerated)	Wet	No	Yes	MSD monitors all wet weather SSOs and reports to the Ohio EPA on a monthly basis.				
Combined (all)	Dry	Yes	No	Although no specific overflow monitoring would be performed, MSD will monitor these areas for chronic problems.				
Combined (EXCEPT Permitted)	Wet	Yes	No	Although no specific overflow monitoring would be performed, MSD will monitor these areas for chronic problems.				
Combined (Permitted)	Wet	No	Yes	MSD is monitoring all CSOs under a NPDES permit-OEPA Permit No. 1PX00022*AD.				
The Metropolitan Sewer District Wastewater Treatment Division's "Pump/Lift Operation and Maintenance Procedures" as revised February 2002 is he incorporated by reference.								

Overflow Destination

The "destination" is the ultimate point where a sewer overflow enters the environment once it leaves the collection system. An understanding of this is necessary to ensure the proper execution of an overflow response.

Typically, sewer overflows will end up in one or more of the following destinations:

- Pooled in low areas adjacent to an overflow,
- Surface streams,
- Storm sewers and then ultimately a surface stream or ditch
- Basements.

The destination of sewer overflows depends in part if they occur at "design SSO or CSO" locations, rather than arbitrary points in the collection system. "Design SSO or CSO" locations are those which are configured to provide hydraulic relief to the system during wet-weather conditions and are generally equipped with overflow pipes or weirs set at a level to minimize the potential for water-in-basement incidents and still convey the maximum possible flow downstream for treatment.

Size of Tributary Area

By knowing the size of the area upstream, the crew has an idea in knowing flow rate and volume discharged. Second, if industries are upstream, crews can determine if special industrial pollutants may be encountered. This will assist in determining whether special safeguards must be taken. In the CAGIS Mapping system there is a Sewer Trace Tool that identifies the sewers upstream or downstream from a given point or SSO location. The length of sewer found in the trace is provided along with a graphical display of the sewer locations. This information is available in the field laptop computers and the office desktop computers.

MSD maintains a database of permitted industrial users, the company address is used to graphically display the location in the CAGIS Mapping system. The Sewer Trace Tool can also identify industrial users upstream or downstream from a given point or SSO location.

Site Accessibility

Site accessibility is an important factor in determining the response to a sewer overflow. To address limited access site conditions, MSD has track mounted loaders, bulldozers and backhoes to repair sewer failures, and four wheel drive farm tractors for flush cleaning and CCTV inspection. If truck mounted equipment is required to address an overflow, a temporary

road will be constructed. The response to a sewer overflow in areas of limited accessibility is determined on a case-by-case basis.

Weather Conditions

Since portions of the sewer systems are either combined or subject to infiltration and inflow, the sewer overflow response strategy will depend on recent precipitation in the upstream sewershed. This is particularly important if bypass pumping is necessary or if the repair is being performed in a combined sewer.

Sanitary Sewer Overflow Classification

As a part of the <u>General Compliance Plan to Eliminate Sanitary Sewer Overflows</u>, prepared in 1993 and supplemental update reports in 1994 and 1996, SSO locations were classified on the basis of activity. In order to provide clarity of understanding among all parties, a classification system was created to describe SSO activity in "common" terms. As a result, SSOs were placed into 7 categories:

- Highly active,
- Generally active,
- Generally Inactive,
- Inactive,
- Unclassified,
- Removed, and
- Reclassified.

This classification methodology is empirical. Divisions between classifications are non-distinct and a matter of judgment. Nevertheless, most SSOs maintain a generally constant behavior pattern consistent with their classification which is discussed further below.

"Highly active" is the leading category for SSO activity. Highly active SSOs may be triggered by minimum amounts of rainfall, typically higher than 0.25-0.5 inches over the entire sewershed.

"Generally active" is the second leading category for SSO activity. These locations overflow less often than those in the highly active category. Discharges are generally triggered by rainfall events greater than 0.5-1.5 inches over the entire sewershed. Unlike the highly active locations, discharge frequency appear to be more impacted by in-situ ground soil moisture.

The "generally inactive" category applies to locations that typically discharge only from large precipitation events. This can generally be interpreted as events exceeding 1.5 inches of rainfall.

The "inactive" category applied to locations that have not discharged, or do not appear to be prone to do so. Some inactive locations are in "problem" areas where a cluster of SSOs exist. Sometimes an inactive location is in close proximity to a more active location; however, it does not discharge because it is at a higher elevation.

For other "inactive" locations, it is not clear why a relief structure was provided. It is believed that some locations may have been diversion points ahead of small subdivision wastewater treatment plants. When the plant was decommissioned and brought into a regionalized system, the outfall was never closed.

The "unclassified" category is used for newly discovered SSO locations, for which there is not enough data to make a classification. For most sites, a 6 month period is the minimum time necessary to reasonably forecast SSO activity. For sites that are "inactive" a longer time is necessary to confirm activity.

The "removed" category applies to SSOs that have been de-registered from the master list. In most instances, CIP projects were responsible for removing SSOs; in others, MSD subjected the location to a "graduation" procedure to ensure that it would not pose a risk if it was eliminated.

"Reclassified" is a category used to relabel a SSO as a CSO. In some instances, when the original classification was made, the structure was near the border between separate areas and combined areas. Other times, small pockets of combined sewers existed in areas that were originally considered "separate".

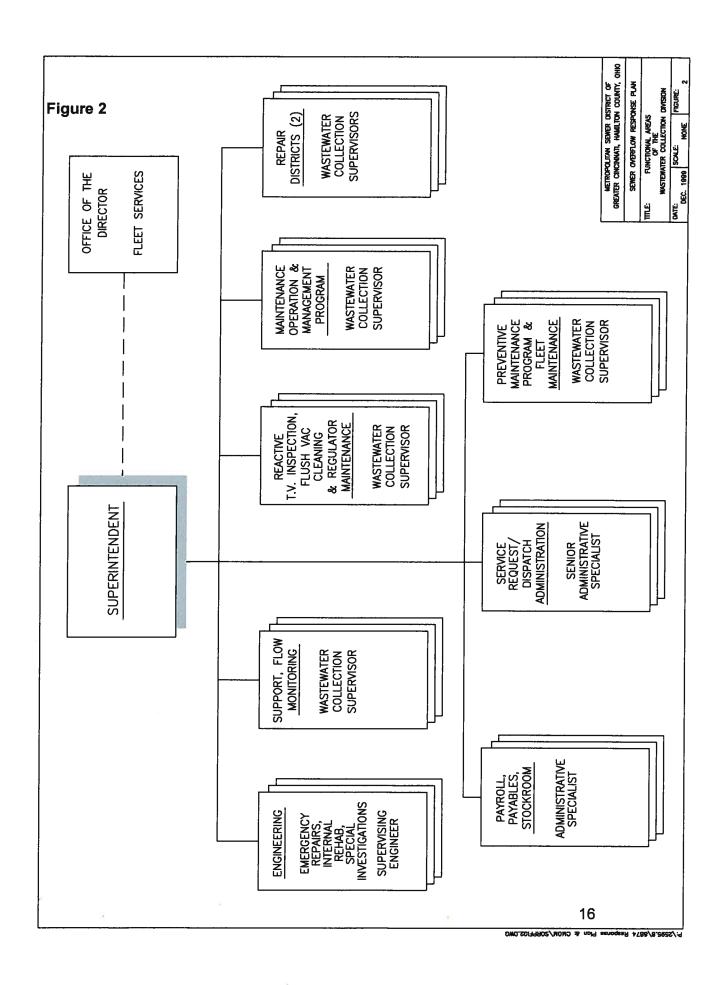
3.0 MSD'S APPROACH TO SEWER OVERFLOW RESPONSE

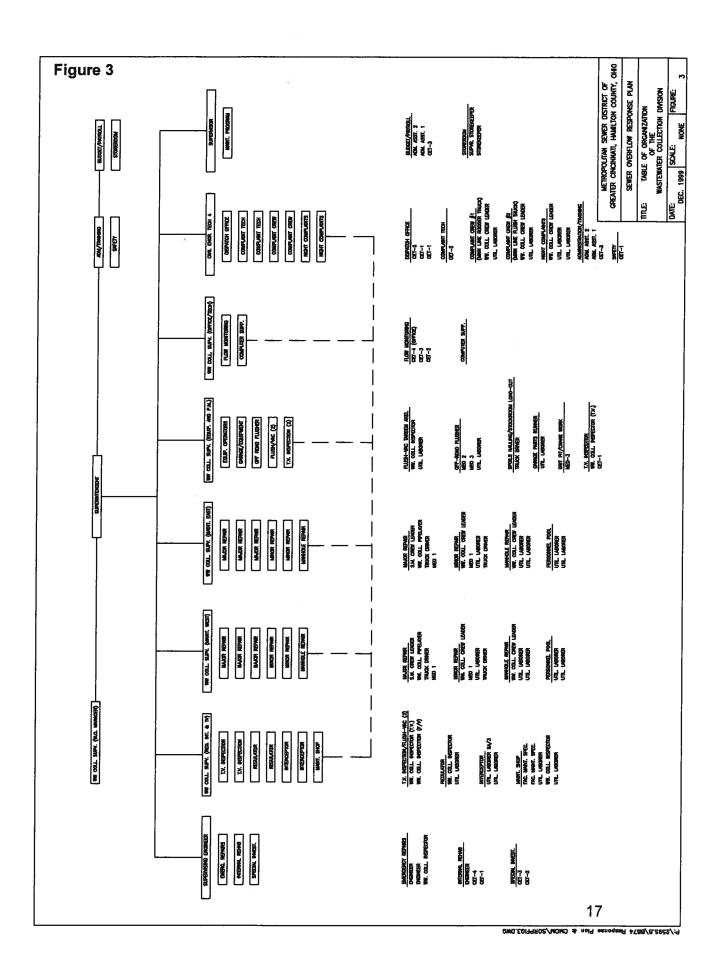
The Wastewater Collection (WWC) Division is responsible for the inspection, maintenance, and repair and rehabilitation of the wastewater collection system, which includes all combined sewers, separate sanitary sewers, combined sewer regulators and appurtenances.

As such, it is the WWC Division that is primarily responsible for the successful resolution of sewer problems including "overflow response."

Table of Organization

Figure 2 shows "Functional Areas of the Wastewater Collection Division" and Figure 3 is a "Table of Organization of the Wastewater Collection Division." The functional relationship of these positions as related to dryweather sewer overflow response is described in the following chapter; however, several warrant introduction at this time - the Dispatcher, the Supervisor, the Response Teams, the Superintendent and the Director.





The Dispatchers are the first line of contact with the public. The Dispatch Office is used to keep reports once the response teams are done with a call. All records are maintained in an organized manner and available to MSD personnel.

Dispatchers collect information over the telephone in a calm, friendly and professional manner. This task may be complicated by the fact that the person calling may be upset, confused or unknowledgeable about the problem being experienced. During normal working hours, the Dispatchers work out of the WWC Division at 225 W. Galbraith Road. During evenings and weekends, calls are received by the dispatcher at the "after hours" desk of MSD at 1600 Gest Street, who in turn dispatch first response teams or contact "on-call" supervisors if the reported problem warrants additional evaluation or supervision. The Dispatchers have the authority to cross over MSD Division lines to obtain the assistance of any supervisor or secure any equipment that may be necessary to resolve the problem.

The second key positions are the "Supervisors". These persons hold positions of supervisory authority under the Superintendent and are senior operations staff and Division engineers. Supervisors work with the crews to resolve sewer maintenance problems and serve as a liaison between the crews and the Superintendent. During normal working

hours, there are a number of supervisors who can handle problems as they arise.

During evenings and weekends, problems are referred to the "Supervisor on Call" or the first or second backup "Supervisor on Call." Supervisors on Call are changed on a rotating basis once every month. Industry standard communications technology is used to contact "on call" supervisors. Assuming 3rd shift is 12:00 p.m. to 7:30 am – the 24 hour dispatcher contacts the "on call" supervisors with any requests for service. The "on call" supervisor calls out the appropriate crew. Past history of 3rd shift requests for service does not justify a full time 3rd shift crew.

The third group is the Response Teams. They are responsible for finding the location of the problem, communicating with the affected public, accurately evaluating the problem, communicating their findings to the Supervisor, and then taking necessary steps to resolve the problem. MSD shall maintain adequate staffing to meet these responsibilities. The WWC Division currently has 4 response teams available during the day shift (7:30 a.m. to 4:00 p.m.), and 1 team during the evening shift (4:00-midnight). If these staffing levels change, notice shall be provided to EPA and OEPA in the annual report required by Paragraph IX.C of the Consent Decree.

Response Team activities may include, rodding or flushing the sewer line. For more serious problems, teams work with the supervisors to plan and execute an acceptable remediation strategy. This may include the mobilization of construction equipment to "dam-up" an area of sewer overflow and then recover it by pumping. As a final step, the impacted area may be flush/pumped and deodorized. There may be instances where it is deemed that the resources needed to adequately address a problem require effort beyond MSD forces. This is particularly true of main line breaks where there is a risk of a significant sewer overflow. In these situations, MSD may enlist the aid of an emergency contractor. MSD maintains a general services agreement with several companies for situations that require the prompt reconstruction of sewer lines. The Emergency Sewer Repair Contractors (ESRCs) are normally managed by the Wastewater Collection Division Engineering Section, however the six Wastewater Collection Supervisors have full authority to call out any of the ERSCs if a sewer failure requires additional resources.

These companies are capable of mobilizing construction equipment and personnel quickly to handle emergency assignments. Typical projects may include the reconstruction of sewers damaged in hill slides and those with severe structural failure. The MSD contracts for emergency sewer repairs typically require the contractor to respond to the site within 4

hours of notification to mobilize. This response time and the level of response will vary because of several factors, some are identified below:

- Location of the sewer repair in relation to the contractor's equipment yard.
- Scope of the repair, size of sewer, depth of sewer and volume of flow.
- The size, type and availability of equipment and number of workers.
- The time of day, day of the week and the proximity to a holiday
- Weather conditions, clear, rain, snow, extreme cold or heat

MSD will commit to implement, in the most expeditious manner possible, the non-emergency procurement provisions of applicable City of Cincinnati and County of Hamilton purchasing regulations, the former herein referenced as Appendix E-1 - 10. Emergency procurement provisions are subject to the Hamilton County Administrator's authority delegation, dated April 10, 2001 (Appendix E-12) (which superceded the "Policy for Management of Public Sewer System Emergencies by the Metropolitan Sewer District" [page 172]) and Article 24, Section 2402, "Administrative Rule No. 2," of the MSD Rules and Regulations, effective March 1, 2001 (Appendix E-11).

The Superintendent is in charge of the WWC Division and reports to the Director. Although the Superintendent will normally not be personally

involved in most service calls, he/she is administratively responsible for activities performed by the Division, including all fiscal and budgetary matters and coordination with the Director's office. The Superintendent also is a valuable technical resource who is knowledgeable in the design, construction and maintenance of collection systems and is therefore, frequently involved in devising strategies and directing actions to solve the most complicated problems.

The Director is the administrative head of the MSD and is responsible for the activities of all operating divisions. Although the Director will not be involved in the day-to-day activities of the WWC Division, he/she must be apprised of situations that may gain the attention of the public-at-large, the media or the Ohio EPA. In this manner, the Director can inform the Hamilton County Commissioners and the City Manager, if warranted.

Available Resources

The WWC Division is fully equipped with personnel, equipment and supplies to perform most maintenance and repair projects that may arise due to malfunctions in the collection systems; however, there are times that the WWC Division finds it to be more expedient to utilize emergency contractors.

Typical tasks for the WWC Division include cleaning lines and performing maintenance and repairs on various elements of the collection systems including CSO regulator structures. With their in-house machine shop, the WWC Division has the capabilities to fabricate parts for CSO regulators that are no longer commercially available.

Extensive information on the WWC Division is provided in the Wastewater Collection Division Training Manual, prepared in 1992. Additional information on the inspection and maintenance of the combined sewer systems may be found in CSO operational manuals such as the Greater Cincinnati Combined Sewer Overflow Operational Manual for the Little Miami Service Area, which was originally prepared in 1994 and updated in 1997. It should be noted that companion manuals are also available for the Mill Creek Service area and the Muddy Creek Service Area. These manuals were prepared in accordance with a requirement in the NPDES permit for the combined sewer systems - Ohio EPA Permit No. 1PX00022*AD.

Training

The Division conducts regular training programs for new and existing employees for all key job functions. The SORP will be included in these training programs beginning in the year 2002.

4.0 "REQUEST FOR SERVICE" PROCEDURES

The process utilized by MSD to respond to "Request for Service (RFS)" calls is defined in the Process Flowchart shown in <u>Figure 4</u>. This procedure includes all calls received at MSD, regardless of whether a sewer overflow has occurred.

Each step of the flowchart is described below.

<u>Step 1 - Dispatcher Receives Telephone Call</u>

Request for service calls are received by the Dispatch Office at the following telephone numbers:

Monday-Friday......352-4900 7:30 a.m. - 4:00 p.m.

After Hours.....244-5500

Calls received during normal working hours are taken by the Dispatch Office at 225 W. Galbraith Road, the WWC Division. Calls received after hours are taken by the after-hours Dispatcher at the MSD Main Office at 1600 Gest Street.

"REQUEST FOR SERVICE"
PROCESS FLOWCHART

SCALE NONE

FIGURE

DATE: SEC. 1999

<u>Step 2 - Dispatcher Logs Call on a "Request for Service" Form and Pages the First Response Team</u>

At this time, the Dispatcher manually logs key information onto the "Request for Service" form and then enters it into a Foxpro database. Information to be obtained is as follows:

- Name of the person calling,
- Address and phone number of the person calling,
- Time and date the call was received,
- Location, and,
- Details of the problem.

A reproduction of the "Request for Service" form is provided in Chapter 5.0.

Dispatchers are trained to elicit information on the exact nature and magnitude of the problem, including whether the sewer problem is on private property or in the MSD owned main-line sewer.

Also, during this step the Dispatcher pages crews by radio to respond to the service call. Depending upon the location and nature of the problem, one of three types of crews may respond:

- Technician in van,
- 2 person crew in rodder truck, and
- 3 persons in a complaint/rodder truck (after hours crew).

Below is a list of equipment carried by the various first response crews.

STANDARD EQUIPMENT FOR COMPLAINT CREWS

(April 18, 2000)

PERSONAL EQUIPMENT

MSD Uniform

MSD I.D. Badge

Hard Hat

Safety Glasses

Safety Traffic Vest

Safety Boots

Gloves: Leather palm, Leather driving gloves, rubber gloves

GENERAL EQUIPMENT FOR ASSIGNMENTS

Pager

Cell phone

Hand-held radio

Computer/ Arcview & Complaint Tracking

Location Sheet Pad

WIB Sheet Pad

Odors Sheet Pad

Blue Cards

White Cards

Complaint forms

Street guide

Traffic Cones

Atmosphere Meter

Manhole Hook

Flash light

Mirror

100' Tape

Tripod and accompanying equipment

MH lids

Rope w/hook

Grabber Poles

Probing poles

MH wrenches for unlocking MHs

Wrenches, for bolts on some MHs

Paint (Green)

Survey Orange tape

Spike, to go through pavement

Sledge hammer
Dye tablets
Hydrant Water hoses (50' lengths, 5' each)
Hydrant wrench
Hydrant fittings, for adapting hoses to hydrant
Hydrant pump

Step 2A - Dispatcher Logs Data from "Request for Service" into a Database

Information from the telephone call is entered into a FoxPro database.

This database is made available to all MSD divisions; however other divisions cannot change information entered by the WWC Division.

Step 3 - First Response Team Conducts an Initial Investigation

During this step, the crew arrives on site and locates the problem. Each First Response Team is provided with a laptop computer. Using ArcView, they can access Cincinnati Area Geographic Information System (CAGIS) mapping of the area. This will provide information on features including sanitary sewers, combined sewers, waterlines, gas lines, properties, roadways and rivers/streams. This information is particularly valuable to track the ultimate destination of a sewer overflow and in the event that bypass pumping is to be set-up.

At this time, the first response team is responsible for assessing the cause of the problem and making an initial determination of the level

^{**}Electric Mole machine/200' cable (requires a 2 person crew)

^{**}Various cable tools (1" spear, 3" spear, 1" pigtail, 3" root saw, etc.)

^{**}Gasoline Rodder Machine/300' of rods (requires a 3 person crew)

of effort required to correct the problem. First Response Teams try to "plan for the worst and hope for the best." In this manner, they can avoid unnecessary delays and difficulties that can occur by underestimating the situation initially.

<u>Step 4 - The First Response Team Completes Investigation and Reports to Dispatcher</u>

At this point, the First Response Team has evaluated the situation and made a report to the Dispatcher. The Dispatcher in turn notifies the appropriate Supervisor, if field conditions warrant their direct involvement.

<u>Step 5 - The First Response Team Fills Out a Written Report</u>

This is a continuation of the previous step. Findings of the investigation are logged in a written report, which is a continuation of the original "Request for Service" document. This information is then returned to the Dispatch Office for proper logging.

<u>Step 6 - Will the Problem Release Sewage into "Waters of the State"?</u>

At this point the First Response Team has evaluated the situation and reported to the Dispatcher if sewage will be released to the Waters of the State. The Dispatcher, in turn, notifies the Supervisor. The Supervisor, or his designee, places the call to the OEPA.

Step 6A - Supervisor Calls OEPA Spill Response Hotline

The spill response hotline for the Ohio EPA, Southwest District Office is 1-800-282-9378.

Step 6B - Supervisor Informs the Superintendent

The preceding steps may all occur within a timeframe of several hours. The problem may be resolved or well under control before the Superintendent can be made aware of the particular situation. The need to inform the Superintendent at this time should be determined on a case-by-case basis utilizing the judgment and experience of those persons involved. The Superintendent must be made aware of a problem in the event of the following situations:

- Releases of sewage into the environment,
- Events that may gain the attention of the media or the public-atlarge, and
- Problems that cannot be resolved quickly or where an emergency contractor is needed.

Step 7 - Is Problem MSD's Responsibility?

From this step forward, the initial determination has been made as to the likely cause of the problem and the Supervisor assists with an appropriate course of action. The first question pertains to ownership of the sewer line. If the problem is on private property, then Step 7A is undertaken. If the problem is in the building service line in the public right-of-way, MSD will assist the homeowner with bypass pumping. If the problem is in the main-line sewer owned by MSD, then one proceeds to Step 8.

<u>Step 7A - Problem is Referred to Appropriate Party: Property</u> <u>Owner or Health Department</u>

In some instances, service calls may be received for private sewers.

MSD has no jurisdiction over these lines. Accordingly, these service calls are referred to City or County Boards of Health, whichever is appropriate. Telephone numbers are provided in Chapter 5.0.

Step 8 - Can Problem be Solved with MSD Forces?

During this step, the team and Supervisor decide whether the problem can be handled with MSD forces alone or if emergency contract assistance is needed. In many instances, the First Response Team on-site is fully capable of resolving the problem. In other instances, additional MSD maintenance teams may be paged.

Step 9 - Supervisor Enlists Aid of an Emergency Contractor

Occasionally, a problem will be encountered, such as a main-line sewer break, when an emergency contractor is brought in to solve the problem. This generally occurs when problems are large and beyond the resources of the MSD staff and crews.

Step 10 - Supervisor Informs the Superintendent

This step is essentially a repeat of Step 6B. In this situation, it is customary to inform the Superintendent.

<u>Step 11 - Response - Take Appropriate Action to Stop, Contain</u> and Clean-up Impacts of a Sewage Release

The previous steps describe the decision-making process to assess the impact of a problem, to assess the degree of MSD responsibility and to mobilize the appropriate resources. During this step the First Response Team, in house maintenance crews and emergency contractors take appropriate action to stop, contain and clean-up impacts of a sewage release. These procedures are described in Section 4.2. All of the actions described below may be undertaken sequentially or concurrently.

Step 12 - Is a News Release Necessary?

In general, the Division's response to problems is so fast that problems are solved before the public can even become aware. However, there are other instances, due to magnitude, location and

time of the problem that the Superintendent and Director may decide to issue a news release.

Step 12A - Director Issues a News Release

Under this step, the Director's office issues a news release of the problem, its cause and actions being taken to resolve it.

Step 13 - Actions to Solve the Problem are Concluded

At this point, all work to correct and remediate the problem is completed.

<u>Step 14 - Response Teams and Supervisor Complete the Report with Time Sheets and Billing Information</u>

This is the final step in the response flowchart where all paperwork on the incident is completed and returned to the Dispatch Office. The report is a continuation of the original "Request for Service". The report is also used as a repository for billing and cost information.

4.2 <u>MSD Formulates a Division - Wide Response to Stop, Contain and Clean-Up Impacts of a Sewage Release</u>

MSD will formulate a response that is site specific and considers the following situations:

- time of day and day of week (holidays)
- location and accessibility of equipment
- time of year
- current and projected weather forecasts
- receiving stream
- size and type of sewer
- estimated volume of bypass
- in some cases the river stage
- availability of necessary equipment
- employee availability

The remainder of this section describes general practices employed by the WWC Division to stop, contain and clean up the impacts of a sewage release.

It should be noted that every response is site specific and may include, but not limited to any combination of the following activities:

- Probing
- Rodding
- Machine Cleaning
- Flush/Vaccing
- CCTV Inspection

Excavate/Reconstruction

Measures to Contain the Overflow

The purpose of containment is to minimize the affected area of impact until further action can be taken.

Containment of Overflow

Containment is site specific and may include, but not limited to:

- Using natural creek depressions
- Constructing earthen dams
- Constructing sand bag dams (roadways and creeks)

Convey Contained Flow Back to System

 The WWC Division will make a concerted effort to return the contained flow back to the collection system by means of pumping or gravity conveyance.

Maintenance of Flow

In the event of a prolonged sewer line blockage or a sewer line collapse, the crew may set up a portable bypass pumping operation to maintain existing flow. The WWC engineering staff may assist to determine the proper size and number of pumps required to effectively handle the sewage flow and the crew may periodically monitor the bypass pumping. Depending upon site

conditions centrifugal pumps or hydraulic submersible pumps may be utilized along with overland piping systems.

Measures to Clean up the Impacts of an Overflow

Once measures to stop, contain and maintain flow have been established, the WWC Division will undertake actions to clean up the effects of a sewer overflow in the following manner:

- Where sewage and residual materials have resulted in ponding, the sewer overflow is recovered through flushing and/or pumping
- Next, the overflow path upstream of the containment area is flushed with water, if available, and recovered to the sewer system
- If appropriate, the overflow area is deodorized with a nontoxic, odor masking agent

Prevention

The WWC Division places a premium on preventive maintenance activities. Following the completion of sewage release containment and clean up, the causes of the discharge are evaluated to determine possible improvements to prevent future problems. Causes of discharge have included:

- Vandalism
- Pipe collapse
- Debris build-up

Where possible, MSD will take appropriate actions to reduce the potential of a reoccurring sewage release and has found the following activities to be particularly helpful.

- Secure manhole lids/limit access to structures
- Repair the sewer system as problems are discovered
- Perform scheduled maintenance activities such as root removal and cleaning

If maintenance activities cannot resolve the sewage release, then the SSO will be referred to the Engineering Division for further investigation and possible capital improvement.

5.0 COMMUNICATIONS

This chapter provides an overview of communications practices followed by MSD to document findings of service calls and sewer overflows. This includes special forms used by the WWC Division and information disseminated to the public.

All notification and reporting of SSOs to regulatory agencies shall be consistent with MSD's **SSO Monitoring and Reporting Plan** (January 2002).

Important Phone Numbers

City of Cincinnati Board of Health:

East Side 352-2908

West Side 564-1750

Hamilton County Board of Health

326-4500

Ohio EPA Spill Hotline (OEPA-SWDO) 1-800-282-9378

The "Request for Service" Form

The "Request for Service" form is the primary method utilized by the WWC Division to record a sewer related problem. This form follows all activity revolving around the problem from the initial call to final disposition. The "Request for Service" is assigned a number, which

follows the call. In this manner, MSD maintains a chronological record of all calls. This record becomes useful to the District in scheduling maintenance, repair project and special projects and Capital Improvement Program projects.

News Release

The Director or Superintendent, following consultation with local Health officials, may issue a news release for any sanitary sewer overflow due to magnitude of discharge, location or time of discharge or an unusual threat to the public. The news release will identify the problem, the cause and actions being taken to solve it.

Metropolitan Sewer District Wastewater Collection

Date:	

uest		

Time	ο.		

Foreman	Last Name
Phone: Business	
Location	Phone: Business
Location	
Near Intersection	Home
Near Intersection Sub Area Zip Code	on
City/Township Sub Area Zip Code Details Job Order Address Foreman Repair ST SW SOD R/W Est. Days Size of Cut Number UT# WW On Site Date: Unit Responding:	ddress
City/Township Sub Area Zip Code Details Job Order Address Foreman Repair STSWSODR/W Est. Days Size of Cut Number UT#WW On Site Date:Unit Responding:	ear Intersection
Address	
Address	etails
Address Foreman Repair STSWSODR/W Est. Days Size of Cut Number UT#WW On Site Date: Unit Responding:	
Date: Unit Responding:	Address Foreman Repair STSWSODR/W_ Est. Days Size of Cut NumberUT#WW
Time Received: Arrived: Finish:	
	Time Received: Arrived: Finish:
ondition Found and Temporary Action Taken (Make All Referrals by Name - Do Not Use Radio Numbers)	and Temporary Action Taken (Make All Referrals by Name - Do Not Use Radio Numbers)
Pump# P/U Pump EIB Office Use	

Signage

MSD will erect signage (where practical) to inform the public that a "rain" related sewer overflow has occurred at one of the locations identified in <u>APPENDIX "A".</u> APPENDIX "A" is based on the "rain related" SSOs reported to OEPA. Future signage will be added or deleted to conform to the "rain related" SSOs reported to OEPA.

In certain instances, MSD may wish to erect temporary signage to inform the public that a "non-rain" related sewer overflow has occurred. An example of such a circumstance may be if the sewer overflow is prolonged and the chance for public contact is high. The decision to erect signage should be based largely upon judgment of those involved and done on a case-by-case basis. Figure 5 presents an example sign that could be erected by crews if needed.

Figure 5

WARNING

SEWER OVERFLOW

Water in this area may contain sanitary sewage.

Contact with sewage

poses a potential health risk.

For more information, call:

METROPOLITAN SEWER DISTRICT (513) 352-4900

Public Education

MSD undertakes a significant effort to educate the public through formal presentations in schools and tours of treatment facilities. The purpose of this effort is to enlighten the public about MSD's role as a leading steward of the environment and provide information on activities undertaken by MSD.

6.0 APPENDICES

- A SSO Locations
- B CSO Locations
- C Information Given to the Public by the WWC Division
- D Other Forms
- E Referenced Codes & Policies:
 - City of Cincinnati Purchasing Regulations
 - Hamilton County Administrative Rule #2
 - Board of Hamilton County Commissioners
 Emergency Policy for Sewers

APPENDIX A SSO LOCATIONS

LIST OF SANITARY SEWER OVERFLOW LOCATIONS

MSD FACILITY	LOCATION	CLASS
0.0	End of Sultana Drive Cul-De-Sac	Removed
70.0	Plainville Road north of Little Duck Creek	Removed
77.0	Intersection of Murray Avenue and Simpson Avenue	Removed
103.0	Avon Drive cul-de-sac	Removed
216.0	Intersection of Muddy Creek Road and Westbourne Road	Removed
219.0	South of Intersection of Burns and Ferndale Avenues	Removed
222.0	Intersection of Connecticut Court and Connecticut Avenue	Generally Inactive
225.1A	Intersection of Middleton Avenue and Rawson Woods Lane	Generally Inactive
227.0	Intersection of Kennedy and Iris Avenues	Removed
228.0	Intersection of Kennedy, Iris, and Dante Avenues	Highly Active
477.0	Vibet Court	Removed
508.0	245 Clark Avenue, near bridge	Removed
519.0	5110 Froome Avenue	Removed
530.0	6309 Betts Avenue	Highly Active
531.0	Intersection of Goodman and Bake Avenues	Highly Active
531.0	Intersection of Goodman and Bake Avenues	Highly Active
565.0	9590 Kemper Road, Across Polk Run Creek	Generally Inactive
566.0	Hosbrook Drive at Hosbrook Manor Apartments	Removed
567.0	6936 Grace Avenue	Highly Active
568.0	Intersection of W. Galbraith and Gloria Avenues	Generally Active
569.0	Intersection of W. Galbraith and Rob Vern Avenue	Generally Active
570.0	Intersection of Euclid and Maple Avenues	Highly Active
571.0	435 Elliott Avenue	Removed
572.0	406 Elliott Avenue	Highly Active

MSD FACILITY	LOCATION	CLASS
573.0	1801 Carpenter Avenue	Removed
574.0	2014 Carpenter Avenue	Generally Removed
575.0	6849 Beechmont Avenue, near Anderson	Removed
	Township Lane	
576.0	Intersection of Swift and Attica Avenues	Highly Active
577.0	Sterling Avenue	Highly Active
578.0	Royal Glen Avenue, east of Blanchetta	Removed
	Avenue	
579.0	Intersection of Richmond and Orchard	Generally Inactive
	Avenues	
581.0	At Intersection of Montgomery and Quatman	Removed
	Avenues	
581.1A	Quatman Avenue, West of Montgomery	Removed
	Avenue	
583.0	Located at intersection of Osceola Avenue	Removed
	and Camargo Road	
584.0	North Bend Road, near Bridge over Mill	Removed
	Creek	
585.0	1273-1279 Norman Avenue	Generally Inactive
586.0	Intersection of Vale and North Park Avenue	Removed
587.0	11460 Rose Lane	Generally Inactive
588.0	6963 Salem Avenue	Generally Inactive
589.0	6778 Leconte Avenue	Generally Inactive
590.0	3332 W. Galbraith, west of Cella Avenue	Generally Inactive
591.0	Intersection of Euclid and Maple	Generally Inactive
592.0	Hamilton at Sundale Avenue	Removed
593.0	Intersection of Savannah and Catalpa	Generally Active
···········	Avenues	
597.0	6929-6933 Leboiteaux Avenue	Generally Active
599.0	Intersection of Hamilton and Claretta	Removed
	Avenues	
600.0	Intersection of Plainfield and Schenck	Generally Inactive
	Avenues	
601.0	Intersection of Plainfield and Hoffman	Generally Active
	Avenues	
602.0	Intersection of Matson and Monticello	Removed
	Avenues	
603.0	8879 Plainfield Avenue	Generally Active

MSD FACILITY	LOCATION	CLASS
604.0	Intersection of State and Miami Avenues	Removed
606.0	1519 Kenova Avenue	Removed
607.0	O'Leary Avenue, east of May Street	Inactive
608.0	Intersection of Southside and Dawson Avenues	Generally Inactive
609.0	4001 Oak Avenue	Removed
610.0	Frondorf Road south of Bridgetown Road	Removed
611.0	Intersection of Hamilton and Catalpa Avenues	Inactive
612.0	Hamilton Avenue, south of Lakeknoll Apartments	Generally Inactive
615.0	Intersection of Eastern and Deering Avenues	Removed
619.0	3950 Landsdowne Avenue, west of May Street	Removed
620.0	9094 Eldora Drive, behind house near Cooper Creek	Highly Active
623.0	Intersection of Viscount and Delhi Pike	Generally Active
624.0	613 Stewart Avenue, west of Anthony Wayne	Removed
625.0	Intersection of Davis and Rolef Avenues	Inactive
627.0	3763 Thornton Avenue	Removed
628.0	Pippen Road, north of Adams Road	Highly Active
631.0	3717 North Berkely Circle	Removed
632.0	Race Road, north of Raceview Road	Removed
634.0	Intersection of W. Galbraith and Parrish Avenue	Highly Active
635.0	Intersection of Linden and Lake Avenues	Removed
639.0	1276 Compton Road, near creek	Generally Inactive
640.0	3001 Shadycrest Avenue, behind house near creek	Generally Inactive
641.0	Intersection of Beechmeadow Lane and Ralph Avenue, near the creek	Inactive
645.0	Intersection of Middletown and McAlphin Avenues	Generally Active
646.0	Intersection of Linden and Larchmont Avenues	Inactive

MSD FACILITY	LOCATION	CLASS
647.0	Behind 9600 Ross Avenue, near the creek	Inactive
675.1A	Muddy Creek at Anchor Cove Marina,	Generally Inactive
	west side	
675.2B	Muddy Creek at Anchor Cove Marina, east	Removed
	side	
676.0	Muddy Creek Pump Station Outlet	Pump Station
	Chamber	
678.0	Park Avenue	Removed
679.1A	6501 Park Avenue, behind the house	Highly Active
679.2B	6500 Mariemont Avenue, behind the house	Highly Active
680.0	Near the intersection of Wooster Pike and	Highly Active
	Park Avenues	
681.0	9201 Blue Ash Road	Inactive
682.0	9304 Blue Ash Road	Inactive
684.0	6101 Stewart Road, near the bridge	Generally Inactive
685.0	Cross County Highway	Removed
687.0	Intersection of Smiley and Valleyview	Removed
	Avenues	
688.0	North of Indian Creek WWTP	Removed
689.0	Intersection of Anshcutz and Broadway	Removed
	Avenues	
690.0	First Manhole east of Polk Run WWTP	Generally Active
691.0	First Manhole south of Harper Street Pump	Removed
	Station	
692.0	Lowland Road, near Anchor Cove Marina	Inactive
693.0	Sycamore Creek, west of Loveland-	Removed
	Madeira Road	
695.0	Sycamore Creek, 5 MH west of SSO 693	Removed
696.0	Banning Road, east of Colerain, under the	Removed
	bridge	
697.0	Hillside Road Ballfields, near west edge of	Generally Inactive
	fields	
698.0	Route 32, behind SuperAmerica Station	Removed
699.0	Railroad Avenue, in parking lots of Arthritis	Generally Active
	Foundation	
700.0	Behind the Ohio Asphalt Company, near	Highly Active
	Mill Creek	

MSD FACILITY	LOCATION	CLASS
701.0	Intersection of River and Bender Roads, in	Removed
	Rapid Run	
703.0	East of Intersection of Quaillhil and Werk	Removed
	Avenues	
704.0	8811 Tudor Avenue	Generally Active
705.0	9512 Main Street	Generally Inactive
706.0	3933 Race Road	Removed
1000.0	South of the Intersection of Attica and	Generally Active
	Groverhill	
1001.0	Intersection of East Benson and Hill Street	Generally Inactive
1002.0	Intersection of Bake and DeArmand	Generally Active
	Avenues	
1003.0	7131 Hamilton Avenue	Generally Inactive
1004.0	1418 St. Clair Avenue	Removed
1005.0	1834 Sundale Avenue	Generally Active
1005.0	1834 Sundale Avenue	Generally Active
1006.0	At the north terminus of Franklin Avenue	Removed
1007.0	1701-1704 Lincoln Avenue	Removed
1008.0	Intersection of Euclid and Miami Avenues	Generally Active
1009.0	Intersection of Davis and Williams Avenues	Generally Inactive
1010.0	Intersection of Elm and Mulberry Avenues	Generally Inactive
1011.0	Intersection of Rolef and Wilson Avenues	Removed
1012.0	5988 Lawrence Avenue	Inactive
1013.0	One MH west of SSO 625	Removed
1014.0	Chase Creek, south of Juniperview Avenue	Generally Inactive
1015.0	Behind Nathional Guard Armory, off Vine	Removed
	Street	
1016.0	Intersection of Sagamore and Lansdowne	Removed
	Avenues	
1017.0	7907 Euclid Avenue	Highly Active
1018.0	Carmargo Road, south of Shawnee Run	Removed
	Road	
1019.0	MacArthur Park Apartments entrance	Removed

MSD FACILITY	LOCATION	CLASS
1020.0	Intersection of Heile Drive and Hunt Road	Generally Inactive
1021.0	Bernard Avenue	Removed
1022.0	8345 Greismer Avenue	Generally Inactive
1023.0	4021 Matson Avenue	Highly Active
1024.0	1835 Dallas Avenue	Highly Active
1025.0	West High Street, in the woods	Generally Inactive
1026.0	3830 Spencer Avenue	Removed
1027.0	Intersection of Linden and MacGregor Avenues	Removed
1028.0	4334 Runninfawn Drive	Removed
1029.0	#5 Sylvan Drive, behind the house in the creek	Generally Active
1030.0	Intersection of Elsmere and Ashland Avenues	Removed
1032.0	Intersection of Losantiville and Cedarbrook Drive	
1036.0	Intersection of Camargo Road and Shawnee Run Road, near	Removed
1041.0	Intersection of Elm and Burns Avenue	Removed
1042.0	1483 Balfour Avenue, behind the house in the creek	
1043.0	225 W. Galbraith Avenue, near the employee parking lot	
1044.0	6280-6282 Witherby Avenue	
1045.0	Intersection of Cooper and Crescent Avenues	
677.0P	Route 50, opposite Martha Avenue, under railroad bridge	Active
730.0P	Addyston @ 38 Mistletoe Avenue, 30' north of Route 50	Active
747.0P	Placid Meadows @ 529 Covedale	Active
748.0P	Poinsettia @ east curb of Delhi Park Road	Removed
773.0P	Glenview @ 3999 Virginia Court	Active
779.0P	Taylor Road @ 630 Taylor Road	Active
790.0P	Arrowhead Court @ 9096 Arrowhead Court	Active

MSD FACILITY	LOCATION	CLASS
794.0P	Greenpine Acres @ 2068 Persimmon Court	Active
798.0P	Marview Terrace @ 611 Marview Terrace	Active
799.0P	Mill Brook #1 @ 736 Woodfield Road	Active
805.0P	Winton Road #1 @ Winton Road, 150'	Active
	south of Corbett	
833.0P	Glen Lakes @ 9536 McKinney Road	Removed
851.0P	Berkely Woods @ 5291 Sirrup Road	Active
852.0P	Britney Acres @ 8100 Woodruff Road	Active
855.0P	Fries Third @ 5980 Bagdad Drive	Active
856.0P	High Meadows @ 6805 High Meadows	
	Drive	
858.0P	8575 Clough Pike	Removed
859.0P	6009 Virbet Court	Removed
861.0P	Prospect Woods @ 6805 High Meadows	
	Drive	
866.0P	Stanberry Park @ 6069 Tridale Court	
1046	McGraw Avenue, at end of street	
1047	Intersection of Park and Harmony Avenues	
1048	Intersection of Glensprings and Springfield	
	pike	
1049	10290 Montgomery Road	
1050	9169 Tag Avenue	
1051	3312 Main Street, Addyston	
1052	First MH outside Sycamore WWTP	
1053	Temporary outfall, Camargo Road Phase 1	
1054	Mariemont Swim Club	

APPENDIX B CSO LOCATIONS

CSO List Sorted by Drainage Basin and CSO Number

RECEIVING	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	LITTLE DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK		DUCK CREEK	DUCK CREEK	TRIB TO CLOUGH CREEK	TRIB. TO DUCK CREEK	DUCK CREEK	DUCK CREEK	LITTLE DUCK CREEK	DUCK CREEK	TRIB. TO DUCK CREEK	OHIO RIVER	OHIO RIVER	OHIO RIVER	OHIO RIVER	LITTLE MIAMI	LITTLE MIAMI	DUCK CREEK	DUCK CREEK	
AREA	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	CLOUGH	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	DUCK CREEK	
DRAINAGE B	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTLE MIAMI	LITTE MIAMI	``
NAME	5249 CHARLOE ST. GRATING	LAWNDALE GRATING	4730 MADISON AVE. GRATING	END OF HARROW ST. DIV. DAM	MADISON AND REDBANK GRATING	NU-TONE PARKING LOT GRATING	CAMARGO AND EAST FORK GRATING	PLAINVILLE AND INDIAN HILL GRATING	4800 JAMESON GRATING	4713 SETTLE GRATING	6402 ROE ST. GRATING	6333 ROE ST. GRATING	BRAMBLE AND HOMER GRATING	3980 SOUTH WHETSEL GRATING	SOUTHERN AVE. GRATING	BROTHERTON RD. GRATING	3675 FOREST HILLS GRATING	"OLD RED BANK" RD. GRATING	5150 WOOSTER PIKE GRATING	ARCHER ST. DIV. DAM	1351 KENNEDY AVE. GRATING	3979 ROASSLYN DR. GRATING	NORWOOD INCINERATOR GRATING	BERKSHIRE REGULATOR	5637 LESTER RD. GRATING	3646 MADISON RD. DIV. DAM	FORD GATE GRATING	EAST FORK AVE. GRATING	CAMBERWELL AVE. DIV. DAM	YONONTE CR. GRATING	DELTA AVE. WEST REGULATOR	DELTA AND HUMBERT DIV. DAM	DELTA AVE. EAST REGULATOR	DELTA @ EASTERN DIV. DAM	EASTERN AVE. GRATING	GRANDIN ROAD GRATING	TURPIN ST. DIV. DAM PENNSYI VANIA AVE DIV DAM	FEINING I LYAINIA AVE. DIV. DAIN	
EPA STATION	1PX00022326	1PX00022328	1PX00022329	1PX00022330	1PX00022331	1PX00022332	1PX00022333	1PX00022262	1PX00022334	1PX00022335	1PX00022336	1PX00022263	1PX00022337	1PX00022338	1PX00022339	1PX00022340	1PX00022341	1PX00022269	1PX00022342	1PX00022264	1PX00022	1PX00022343	1PX00022344	1PX00022251	1PX00022345	1PX00022265	1PX00022346	1PX00022347	IPX00022348	1PX00022270	1PX00022252	IPX00022317	1PX00022253	1PX00022254	1PX00022318	1PX00022319	IPX00022320	1F AVVV46321	
CSO NO	043	054	190	064	990	890	690	071	072	073	074	075	920	078	620	080	083	084	085	980	135	136		182	187	188	199	200	502	214	467	467A	468	469	470	471	472	7	

RECEIVING	MILL CREEK	MILL CREEK	MIL CREEK	DUCK CREEK	WEST FORK MILL	CREEK LUDLOW RIN	LUDLOW RUN	LUDLOW RUN	WEST FORK MILL CREEK	WEST FORK MILL	CREEK WEST FORK MILL	CREEK	WEST FORK MILL	WEST FORK MILL	CREEK	WEST FORK MILL CREEK	WEST FORK MILL	CREEK	LUDLOW RUN	MILL CREEK	LUDLOW RUN	LUDLOW RUN	MILL CREEK	MILL CREEK	WEST BRANCH MILL	CREEK	BLOODY RUN	TRIB. TO MILL CREEK	TRIB. TO WEST FORK	WEST FORM	WEST FORM WILL CREEK	KINGS RUN WEST BRANCH MILL
AREA	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	VICTORY OF THE STREET STREET, STREET STREET, STREET STREET, ST	SOUTH BRAINCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH DE ANIMATE TO SOUTH AND THE	SOUTH BRAINCH MILL CREEN	SOUTH BRANCH MILL CREEK		SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	WEST BRANCH MILL CREEK		SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK	SOLITH BRANCH MILL CREEK		SOUTH BRANCH MILL CREEK SOUTH BRANCH MILL CREEK
DRAINAGE B	MILL CREEK MILL CREEK	MIL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MII CBEEV	WILL CREEN	MILL CREEK	MII COEEK	Victory Carried	MILL CREEK		MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	MILL CREEK	And the second	MILL CREEK	MILL CREEK	MILL CREEK	MIL CREEK		MILL CREEK MILL CREEK
NAME	LAFAYETTE CIR. GRATING BANK AVE. REGULATOR	MAPLE ST. DIV. DAM	64 TH ST. DIV. DAM	HARVEST AND KINCAID GRATING	MONTANA GRATING	HILLCREST NORTH GRATING	4710 HOWARD GRATING	1547 SPRINGLAWN GRATING	DREMAN GRATING	HOFFNER GRATING	BADGELEY RUN GRATING	TODD #1 GB ATING		HAYS GRATING	TODD #2 GRATING		BUTTE GRATING		GROESBECK GRATING	FITZPATRICK ST. REGULATOR	THOMPSON HEIGHTS GRATING	SPRINGLAWN (a) BRIDGE GRATING	VINE AND DECAMP DIV. DAM	SCARLET OAKS REGULATOR	BLUE ROCK REGULATOR		BLOOD I KUN KEGULATUK	7001 PRODUCTION DR. GRATING HIGHDONIT OD ATMIC	WESTWOOD NORTHERN GRATING	TWIN GRATING		WOODEN SHOE REGULATOR OXLEY GRATING
EPA STATION	1PX00022377 1PX00022277	1PX00022379	1PX00022380	1PX00022327	1PX00022381	1PX00022382	1PX00022383	1PX00022384	1PX00022278	1PX00022387	1PX00022388	1PX0002389		1PX00022390	1PX0002391		1PX00022392		IPX00022403	IPX00022292	IPX00022404	1PX00022405	1PX00022406	1PX00022408	1PX00022293	1DV0002211	1FX00022311	1FX00022409 1PX00022410	1PX00022411	1PX00022412	,	1PX00022414 1PX00022415
CSO NO	030 033	037	039	053	680	109	110	112	11/	123	125	126		127	128) 	130	į	151	152	162	S	171	6/1	180	181	101	191	195	203		217A 226

CSO NO	EPA STATION	NAME	DRAINAGE B	AREA	RECEIVING
419	1PX00077304	BOI DEACE SP DIV DAM	Add I Captaly	The state of the s	CREEK
420	IPX00022418	DELHI AVE. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK SOUTH BRANCH MILL CREEK	OHIO RIVER
421	1PX00022419	REIVER ROAD @ DELHI DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
422	1PX00022295	MT. ECHO RD. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
423	1PX00022420	MT. HOPE AVE. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
424	1PX00022421	RIVER RD. @ STATE DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
425B	1PX00022423	STATE AVE. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
426A	1PX00022424	EVANS AND RIVER RD. #1 DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
426B	1PX00022425	EVANS AND RIVER RD. #2 DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
427	1PX00022426	PERIN AND EVANS DIV. DAM SLUICE	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
428	1PX00022312	SOUTH ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	MILL CREEK
429	1PX00022427	GEST ST. EAST DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	MILL CREEK
430	1PX00022296	GEST ST. WEST-2-DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	MILL CREEK
431A	1PX00022429	BLACKFORD ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER AND MILL
					CREEK
432	1PX00022297	914 AND MCLEAN DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	MILL CREEK
433	1PX00022298	CARR ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
434	1PX00022430	CARR AND FRONT DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
435	1PX00022431	BAYMILLER ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
436	1PX00022299	GEST AND FRONT REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
437	1PX00022432	SMITH ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
438	1PX00022300	CENTRAL AVE. GRATING	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
442	1PX00022433	VINE ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
445	IPX00022301	RIVERFRONT STADIUM REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
447	1PX00022434	RIVERFRONT COLISEUM REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
449	1PX00022435	PIKE ST. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
450	1PX00022436	BUTLER ST. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
451	1PX00022302	SAWYER POINT EAST DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
452	1PX00022437	PARSONS ST. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
453A	1PX00022303	COLLARD ST. REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
454A	1PX00022439	LITHERBURY ST. NORTH DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
454B	1PX00022440	LITHERBURY ST. SOUTH DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
455	1PX00022441	WALDEN ST. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
456	1PX00022442	HAZEN ST. DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
457	1PX00022443	COLLINS ST. WEST DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
457A	1PX00022444	COLLINS ST. WEST REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
458	1PX00022304	COLLINS ST. EAST DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
459	1PX00022445	BAYOU ST. 120 WEST REGULATOR	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER
460	1PX00022446	BAYOU ST. 100 WEST DIV. DAM	MILL CREEK	SOUTH BRANCH MILL CREEK	OHIO RIVER

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RECEIVING	CREEK COMPTON CREEK CILLEY CREEK COMPTON CREEK CILLEY CREEK CILLEY CREEK WEST BRANCH MILL CREEK	WEST BRANCH MILL	CREEK BLOODY RUN MILL CREEK WEST BRANCH MILL	CKEEK CILLEY CREEK WEST BRANCH MILL	TRIB. TO MILL CREEK BLOODY RUN	MILL CREEK MILL CREEK	MUDDY CREEK OHIO RIVER	MUDDY CREEK
AREA	WEST BRANCH MILL CREEK SOUTH BRANCH MILL CREEK WEST BRANCH MILL CREEK SOUTH BRANCH MILL CREEK WEST BRANCH MILL CREEK	WEST BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK SOUTH BRANCH MILL CREEK WEST BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK WEST BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK SOUTH BRANCH MILL CREEK SOUTH BRANCH MILL CREEK	SOUTH BRANCH MILL CREEK SOUTH BRANCH MILL CREEK	MUDDY CREEK RIVER ROAD	MUDDY CREEK
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NAME	DALY RD. VORTEX SEPARATOR 146 RIDGEWAY GRATING 6246 MARIE GRATING #41 SHERRY GRATING #96 NORTH PARK GRATING	117 E. CHARLOTTE GRATING	VINE ST. DIV. DAM P & G #3 REGULATOR 914 OAK ST. GRATING	60 ST. CLAIR GRATING 428 SOUTH COOPER GRATING	RIDGE @ LAKEVIEW DIV. DAM MURRAY RD. DIV. DAM 25 SPRUCE DIV. DAM	HAZEN ST. @ GLEN ALLEY DIV. DAM MCLEAN AND LIBERTY ST. DIVERSION	DAM MUDDY CREEK @ WESTBOURNE GRATING FOLEY RD. DIV. DAM TOPINABEE RD. DIV. DAM ELCO ST. DIV. DAM IVANHOE ST. DIV. DAM REVERE ST. DIV. DAM KENNEBEC ST. DIV. DAM WOCHER ST. DIV. DAM WOCHER ST. DIV. DAM TENIMORE ST. DIV. DAM ANDERSON FERRY RD. DIV. DAM TYLER ST. DIV. DAM TYLER ST. DIV. DAM TYLER ST. DIV. DAM TYLER ST. DIV. DAM ITHIAN ST. DIV. DAM ITHIAN ST. DIV. DAM IDAHO ST. DIV. DAM IDAHO ST. DIV. DAM	ROBB AND WEST ST. GRATING
EPA STATION	1PX00022309 1PX00022473 1PX00022474 1PX00022475 1PX00022476	1PX00022477	1PX00022479 1PX00022483 1PX00022485	1PX00022486 1PX00022488	1PX00022489 1PX00022490 1PX00022491	1PX00022492 1PX00022428	1PX00022316 1PX00022356 1PX00022357 1PX00022371 1PX00022372 1PX00022369 1PX00022360 1PX00022364 1PX00022364 1PX00022364 1PX00022364 1PX00022364 1PX00022364 1PX00022364 1PX00022364 1PX00022364 1PX00022367	1PX00022371
CSO NO	532 535 536 537 537	539	544 558C 559	560 562	651 653 655	999	198 223 402 403 404 406 406 411 411 412 413 415 518	520

RECEIVING	MUDDY CREEK	RAPID RUN	OHIO RIVER	MUDDY CREEK OHIO RIVER
AREA	MUDDY CREEK	RAPID RUN	RIVER ROAD	MUDDY CKEEK RIVER ROAD
DRAINAGE_B	MUDDY CREEK	MUDDY CREEK	MUDDY CREEK	MUDDY CREEK
NAME	WERK AND WESTBOURNE GRATING	RAPID RUN AND DEVILS BACKBONE GRATING	5678 RIVER RD. DIV. DAM CADDIE @ MAEADDEN CDATENIC	STILLE DR. DIV. DAM
CSO NO EPA STATION NAME	1PX00022274	1PX00022275	1PX00022369	1PX00022372
CSO NO	522	523	541	654

APPENDIX C

INFORMATION GIVEN TO THE PUBLIC BY THE WWC DIVISION

INFORMATION ON

HEALTH CONCERNS AND CLEANING A BASEMENT

AFTER A SEWER BACKUP

Heavy storms, blockages or breakdowns in sewer pipes and other events can cause the sewer system to back up into basements. The water contains sewage, even when diluted by storm water. Children and pets should be kept out of the flooded areas until the areas have been cleaned.

Please note that cleanup is not the responsibility of the Metropolitan Sewer District; it is the responsibility of the property owner or resident. The Cincinnati Health Department offers the following information on cleanup if water from the sewer system has entered your basement.

- 1.) Protect yourself while removing the water and cleaning your basement by wearing rubber boots and gloves.
- 2.) Wash clothes and other items which come into contact with the backup water with soap and water.
- 3.) Wash your hands with soap and water.
- 4.) Remove odors and disinfect flooded areas with a solution of bleach (one part bleach in 10 parts water) or other household disinfectants. Do not use ammonia.

Sewage has the potential of carrying microorganisms which cause diarrhea and other diseases, such as Hepatitis A, Salmonella and Giardia, all of which can be killed readily with household disinfectants. The odors may be unpleasant but are not harmful.

If you have any questions or need more information on cleanup, you may call Cincinnati Health Department staff at 357-7392 during office hours; call 357-7435 after 5:00 p.m. or on a weekend.

If you have questions about the sewer system, you may contact the Wastewater Collection Division at 352-4900 between 7:30 a.m. and 4:00 p.m., Monday through Friday. If you have an emergency situation after hours or on a holiday or weekend, call 244-5500.

Wastewater Collection Division Metropolitan Sewer District

GSM/LSF 8/11/93/WIBhandout

Excerpt form "RULES AND REGULATIONS" The Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio

ARTICLE XII SECTION 1207

The owner of the premises served by a sewer shall be responsible for the maintenance and cleaning of the building sewer from the building to the point of connection with the public local sewer and for the maintenance, operation, cleaning, repair, and reconstruction of the building sewer from the building to the property line or point of connection in a public easement. Repair and reconstruction of the building sewer in a public right-of-way shall be the responsibility of the Department. If shall be the responsibility of the owner or his agent to establish, by means of a valid sewer cleaner contractor receipt, that such repair or reconstruction is the responsibility of the Department. The Department shall have the right to verify the sewer cleaner's finding prior to beginning repair or reconstruction. A proper cleanout must be in place prior to such operation by the Department.

INFORMATION SHEET

SEWER ODORS INSIDE BUILDINGS

Dear Resident:

You have expressed concern about the presence of "sewer odors" inside your building. Properly installed sewer lines with water seal traps on all plumbing fixtures will prevent sewer gases or vapors from entering buildings from main sewer lines. Building sewer lines and traps must be properly maintained to prevent serious injury from sewer gases or vapors. Dangerous gases such as hydrogen sulfide and carbon monoxide or vapors from household or industrial sources can be present in main sewers. Explosions in sewers can occur from methane gas produced by decaying vegetation, leaks from natural gas lines or underground gasoline storage tanks.

Often odors are detected inside a building even when the building's sewer lines are not broken. The most frequent cause of this is a dry trap. A trap that has a 2-inch water seal will prevent vapors or sewer gases from entering a building through the sewer lines. Occasionally, a slight smell of sewer odors can be detected from a floor drain, even when the trap is full of water and in proper working order.

The first step to take is to check your indoor plumbing. The drawing on the reverse side details how this plumbing is normally installed. If any of your traps are dry, pour about a gallon of water into them.

Board of Health Regulations and State Building Codes contain sections regulating sewage and plumbing in buildings. The owners of all properties are responsible for maintenance, repair and operation of all sewers and plumbing fixtures on private property.

If you need further information concerning this matter please contact the Metropolitan Sewer District at 352-4900.

Sincerely,

G. Stephen Minges, P.E., Superintendent MSD/Wastewater Collection Division 225 West Galbraith Road Cincinnati, Ohio. 45215

GSM: bkw

APPENDIX D OTHER FORMS

Metropolitan Sewer District Wastewater Collection Division	Date:		
Time:	COMPLAINT	CODI	
Received:	COMPLAINT	FORM	
Nobel Ca.			
CALLER INFORMATION			· · ·
Name:			×
Agency:		Business Phone:	
Address:		Home Phone:	
PROBLEM LOCATION			
Address:		City/Township:	
Audiess.		Oity/Township.	
Nearest Intersection:			
Detailed Location Information	ı:		
Condition Reported:			
Comments:			
ON SITE INSPECTION			
Date:		Unit Number:	
Dispatch Time:	Arrival Time:	Completion Time:	
Condition Found:			
Action Taken:			
Comments:			
Job Order:			
Last Referral:		Last Referral Date:	
For:			
FINAL DISPOSITON			
_			2
By:	Date: / /	Responsibility of:	

ABBREVIATIONS USED ON COMPLAINT FORMS

A ADVISED

A/C ADVISED COMPLAINANT BOH BOARD OF HEALTH

CH'D CKED CHECKED

COMP. COMPL
CWW

COMPLAINT OR COMPLAINANT
CINCINNATI WATER WORKS

DS DOWNSTREAM

DSP DISPATCHERS AT STATION 4

F/V FLUSH/VACUUM FM FORCE MAIN

FV'ED FLUSHED/VACUUMED HAM CO, HAM CTY HAMILTON COUNTY

I/O INTERSECTION OF MANHOLE ML MAINLINE

NBUIMH(S) NO BACKUP IN MANHOLE(S)
NMST NO MAIN SEWER TROUBLE

OPP OPPOSITE R/O REAR OF

STA4, STA10 DISPATCHERS AT STATION 4 OR STATION 10

T&B TAP AND BOLT

TV CLOSED CIRCUIT TELEVISION

US UPSTREAM

EPA CALLS

Date	Time	Address	Person	Situation
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APPENDIX E REFERENCED CODES & POLICIES

Cincinnati Municipal Code Title III

CHAPTER 321:

PROCUREMENT AND DISPOSAL OF SUPPLIES, SERVICES AND CONSTRUCTION

321-13. Procurement; Supplies, Services and Construction in Excess of \$5,000 But Not Greater Than \$25,000.

321-15. Procurement; Supplies, Service and Construction in Excess of \$25,000 But Not Greater Than \$100,000.

321-17. Procurement; Supplies, Services and Construction in Excess of \$100,000.

321-19. Procurement; Professional Services.

321-21. Bid; Competitive.

321-22. Bid; specifications.

321-23. Bid; Form of Invitation for Bids.

321-25. Bid; Surety.

321-27. Bid; Correction, Withdrawal or Cancellation of an Invitation For Bid.

321-29. Bid; Time Extension for Bid Opening.

321-31. Bid; Opening of Bids.

321-33. Bid; Waiver of Defects.

321-35. Bid; Clarification.

321-37. Bid; Award to Lowest and Best.

321-39. Bid; Award on Equal Bids.

321-83. Contract; Multi-Term.

321-85. Contract; Sole Source.

321-87. Contract; Direct Award.

321-89. Contract; Emergency Procurement.

321-13. Procurement; Supplies, Services and Construction in Excess of \$5,000 But Not Greater Than \$25,000.

The city purchasing agent may make any contract for supplies, services or construction involving an expenditure in excess of \$5,000 but not in excess of \$25,000 without additional approval by the city manager or board or commission in whose behalf the procurement is made.

In the case of any contract involving an expenditure not in excess of \$25,000 for the procurement of supplies, services or construction, the city manager or the city purchasing agent may invite competitive bidding by announcement without advertisement and may waive the requirement for a bid or performance surety.

(Ordained by Ord. No. 426-1992, eff. 10-23-92; a. Ord. No. 110-1994, eff. 5-6-94)

321-15. Procurement; Supplies, Services and Construction in Excess of \$25,000 But Not Greater Than \$100,000.

The city purchasing agent may make any contract for supplies, services or construction involving an expenditure in excess of \$25,000 but not in excess of \$100,000 without additional approval by the city manager or board or commission in whose behalf the procurement is made.

In the case of any contract involving an expenditure not in excess of \$100,000 for the procurement of supplies, services or construction, the city manager or the city purchasing agent may invite competitive bidding by advertisement and may waive the requirement for a bid or performance surety. Performance surety for construction contracts over \$50,000 shall not be waived.

(Ordained by Ord. No. 426-1992, eff. 10-23-92; a. Ord. No. 110-1994, eff. 5-6-94)

321-17. Procurement; Supplies, Services and Construction in Excess of \$100,000.

The city purchasing agent may make any contract to purchase supplies, services, or construction without additional approval of the city manager, or the board or commission in whose behalf the contract is made, if the contract involves an expenditure in excess of \$100,000.

In the case of any contract involving an expenditure in excess of \$100,000 within a 12-month period for the procurement of supplies or services, the city purchasing agent shall invite competitive bidding by advertising and may waive the bid or performance surety, if deemed by the city purchasing agent to be in the best interest of the city. In the case of any contract involving an expenditure in excess of \$100,000 for the length of the contract, for construction.

the city purchasing agent shall invite competitive bidding by advertising, may waive the posting of bid surety if deemed by the city purchasing agent to be in the best interest of the city and shall require performance surety of 100% of the contract amount.

The following minimal procedure shall be used for procurements set forth above:

- (a) Each week a listing of such items to be procured shall be inserted in the City Bulletin under the heading "Notice Bids Wanted" indicating the item, reference number and bid closing date.
 - (b) The notice in the City Bulletin shall also indicate for each item:
- (1) That sealed bids will be received at the office of the city purchasing agent until 12:00 noon (local time) on the date specified.
 - (2) That copies of the inquiry are available at the office of the city purchasing agent.
- (3) That performance surety may be required for supplies and service and shall be required for all construction contracts over \$50,000.

The city manager or the city purchasing agent may at any time require advertisement, bid surety or performance surety on any procurement, when such procedure is deemed desirable to protect the best interests of the city. Such procurement shall be awarded on the approval of the city manager or the board or commission on whose behalf the contract is being awarded.

(Ordained by Ord. No. 426-1992, eff. 10-23-92; a. Ord. No. 110-1994, eff. 5-6-94)

321-19. Procurement; Professional Services.

Professional service contracts shall be the responsibility of the city manager or appropriate board or commission. Any department, board, commission may contract for such services without competitive procedures and without requiring a performance surety. The city purchasing agent shall promulgate procedures for the procurement of professional services.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-21. Bid; Competitive.

Competitive bidding shall be used to procure all supplies, services and construction in excess of \$5,000 except as provided in Section 321-17, Procurement; Professional Services; Section 321-51, Proposal; Competitive; Section 321-85, Contract; Sole Source; and Section 321-89, Contract; Emergency Procurement; or other similar provisions of this chapter.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-22. Bid; Specifications.

- (a) Specifications are any description of the physical or functional characteristics or of the nature of supplies, services or construction.
- (b) All city departments, boards and commissions shall specify environmentally preferable supplies, services or construction when appropriate.

All city departments, boards and commissions shall conduct a review of supplies, services or construction specifications to determine whether the specifications either require the use of products manufactured from virgin materials or exclude the use of recycled products, reusable products, or products designed to be recycled. In the event that such specifications do exclude the use of recycled products or require the use of virgin materials, then such exclusions or requirements may be eliminated unless the department, board or commission can demonstrate to the satisfaction of the city purchasing agent that the recycled products would not achieve a necessary requirement or performance standard.

All city departments, boards and commissions shall recommend changes to the city purchasing agent to ensure that performance standards for particular supplies, services or construction can be met and that the specifications are not overly stringent, and to recommend changes to ensure that the specifications will incorporate a requirement for the use of recycled materials, reusable products, and products designed to be recycled to the maximum extent possible, subject to an alternative showing that either the performance of the product will be jeopardized or that the product will negatively impact health, safety, or operational efficiency.

The city purchasing agent may request the bidder to affirmatively demonstrate that recycled material will not jeopardize the performance of the product and will not negatively impact health, safety, or operational efficiency.

(Ordained by Ord. No. 141-1994, eff. 6-3-94)

321-23. Bid; Form of Invitation for Bids.

The city purchasing agent shall state the time and place when and where invitations for bids will be received. The form approved by the city purchasing agent shall be used, and an invitation for bid shall be involved and not considered unless such form is used without change, alteration or addition by the bidder. Bidders may be permitted by the city purchasing agent to bid upon all work and materials to be furnished or upon any part of the work or materials.

Copies of any plans, details, bills of materials or specifications shall be open to public inspection at all business hours between the day of the notice and the day for opening the bids, at the office of the purchasing department where the bids are received, or such other place as may be designated in such notice.

Any bid or performance surety requirements shall be stated in the invitation for bid.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-25. Bid; Surety.

The conditions and form of bid surety shall be in accordance with Section 321-133, Surety; Bid, and Section 321-139(a), Form of Bid Surety.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-27. Bid; Correction, Withdrawal or Cancellation of an Invitation For Bid.

The city purchasing agent is authorized to make written corrections to invitation for bids. The city purchasing agent may withdraw or cancel at any time any invitation for bid, if the city purchasing agent deems such action is in the best interest of the city.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-29. Bid; Time Extension for Bid Opening.

The time, date and place of bid openings may be extended to a later time or date by the city purchasing agent, provided that written or oral notice of a change of time, date or place is given.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-31. Bid; Opening of Bids.

Bids invited by the city purchasing agent by advertisement if the bid is expected to be in excess of \$100,000 shall be opened at the time, date and place specified in the invitation for bid and shall be publicly read in accordance with procedures promulgated by the city purchasing agent.

Bids invited by the city purchasing agent by announcement or by advertisement if the bid is expected to be in excess of \$25,000 but not greater than \$100,000 shall be received and recorded by the city purchasing agent or a designee. No public opening or reading of bids is required.

(Ordained by Ord. No. 426-1992, eff. 10-23-92; a. Ord. No. 357-1994, eff. 10-28-94)

321-33. Bid; Waiver of Defects.

In awarding a contract, the city purchasing agent may waive any variation from the bid requirements or defect in a bid which does not materially affect the competitive nature of the bid, is not in violation of any ordinance, statute or law and does not prejudice the right of the public.

A variance or defect does not materially affect the bid if the terms of the bid are clear and unambiguous, the bid contains all essential elements of the contract, if the amount or competitive nature of the bid is not affected and if the bidder has not received an unfair advantage from having seen the competitor's bid documents.

In considering any waiver, the city purchasing agent shall attempt to secure the best work or materials at the lowest price practicable and shall make such determination in a manner as to fairly and reasonably accomplish such purpose with sole reference to the public interest.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-35. Bid; Clarification.

The city purchasing agent may request clarification of a bid or any part thereof. Clarification shall mean the communication between the city and the bidder regarding the bid. Such communication shall not change the bid, the competitive nature of all bids or violate any ordinance, statute or law and shall not prejudice the right of the public.

In considering any clarification the city purchasing agent shall attempt to procure the best supply, service or construction at the lowest practicable price and shall make such clarifications in such a manner as to fairly and reasonably accomplish such purpose with the sole reference to the public interest.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-37. Bid; Award to Lowest and Best.

Except where otherwise provided by ordinance, the city purchasing agent shall award a contract to the lowest and best bidder or in the case of multiple awarded bidders who has the capability in all respects to perform fully the contract requirements and the integrity and reliability which will assure good-faith performance. The city purchasing agent may consider the bidder's performance on prior and current contracts with the city in determining to whom the award shall be made.

Factors which may be considered in determining the lowest and best bid include, but are not limited to, the following factors which may indicate a bidder's potential for effectively providing equal opportunity for minority group members and women in its contract with the city; information concerning the bidder's current, past and proposed payment of prevailing wages, utilization of minority group members and minority business enterprises, including employment and subcontracts, in the event the selection of the lowest and best bidder is based in large part upon factors indicating the bidder's potential for effectively providing equal opportunity for minority group members and women in a city contract, the contract award may be made only if the bid does not exceed by more than three percent to a maximum of \$10,000 any other lowest and otherwise qualified bidder and if in the opinion of the city purchasing agent the selection of such bidder as the lowest and best bidder will have the greatest potential among the bidders for providing equal opportunity to local minority group members and women to participate in city contracts. "Minority group member" shall mean a person belonging to one of the following racial or ethnic groups: Blacks, Hispanics, American Indians, Alaskan natives, and Asian and Pacific Islanders.

In invitations to bid designated by the city purchasing agent as an environmentally preferable comparison bid, the city purchasing agent, in determining the lowest and best bid, shall deem as favorable the fact that the bidding company offers supplies that contain recycled material, and shall select such bidder as the lowest and best bidder if its bid does not exceed by more than three percent to a maximum of \$10,000 any other lowest and otherwise qualified non-recycled bidder.

In such circumstances where more than one bidder offers supplies with recycled material that do not exceed by more than three percent to a maximum of \$10,000 any other lowest and otherwise qualified non-recycled bidder, the following factors, listed in descending order of preference, shall be considered in determining the lowest and best bid.

- (a) The highest percentage of post-consumer material content.
- (b) The highest percentage of pre-consumer material content.

In addition, the following factors may be considered in determining the lowest and best bid.

- (c) The ability of the product and package to be reused or recycled.
- (d) The volume and toxicity of waste and by-products that a given product generates in its manufacture, use and disposal.

The decision of the city purchasing agent or designee, including whether the environmentally preferable product satisfies the bid requirements, shall be final in the determination of the award.

The total accumulation of all preference percentages from all preference programs now in existence or hereafter established shall not exceed ten percent.

(Ordained by Ord. No. 426-1992, eff. 10-23-92; a. Ord. No. 11-1994, eff. 2-11-94; a. Ord. No. 141-1994, eff. 6-3-94)

321-39. Bid; Award on Equal Bids.

Whenever bids shall be received for supplies, services or construction and two or more bids shall, in the opinion of the city purchasing agent, be equally entitled to be considered the lowest and best bids, the city purchasing agent shall be authorized to award such contract by lot to any one of such lowest or best bidders, or, if the number of such lowest and best bidders is not in excess of three, to divide the award and contract as the city purchasing agent deems best among them or among such of them as shall consent to such apportionment.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-83. Contract; Multi-Term.

Unless otherwise provided by law, a contract for supplies or services may be entered into for any period of time deemed to be in the best interests of the city. The term of the contract and conditions of renewal extension, if any, are included in the solicitation and funds shall be available for the first period at the time of contracting. Payment and performance obligations for succeeding periods shall be subject to the availability and appropriation of funds.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-85. Contract; Sole Source.

A contract may be awarded for supplies, services or construction without competition when the city purchasing agent determines in writing that there is only one source for the required supply, service or construction. A requirement for a particular supply, service or construction does not justify a sole source procurement if there is more than one potential bidder or offeror. The determination of a sole source procurement shall be made in writing and shall include the basis therefor and the duration of its effectiveness. In cases of reasonable doubt, competition shall be solicited.

The city purchasing agent may conduct negotiations, as appropriate, for price, delivery and terms.

The city purchasing agent shall maintain a record of sole source procurements including the contractor's name, the amount and type of each contract, a listing of the supplies, services, or construction procured under each contract and the identification number of the contract.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-87. Contract; Direct Award.

A contract may be awarded for supplies, services or construction without competition when the city purchasing agent determines in writing that it is in the best interest of the city to procure compatible equipment accessories or replacement parts, original manufacturer for supplies, or public utility services or to procure supplies for trial use or testing.

The determination of direct award procurement shall be made in writing and shall include the basis therefor and the duration of its effectiveness. In cases of reasonable doubt, competition shall be solicited. Any request to the city purchasing agent that a procurement be restricted to one contractor shall be accompanied by an explanation as to why no other will be suitable or acceptable to meet the need. The city purchasing agent may conduct negotiations, as appropriate, for price, delivery and terms.

The city purchasing agent shall maintain a record of direct award procurements in excess of \$5,000, including the contractor's name, the amount and type of each contract, a listing of the supplies, services, or construction procured under each contract and the identification number of the contract.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

321-89. Contract; Emergency Procurement.

(a) Emergency.

Notwithstanding any other provision of this chapter, when there exists a threat to public health, welfare or safety under emergency conditions defined in procedures promulgated by the city purchasing agent requiring the immediate procurement of services, supplies, materials, construction, demolition or equipment, the city manager, upon recommendation of the city purchasing agent and the head of the department involved, may waive any

advertising, contract, and surety requirements prescribed by statute or ordinance and the preaward requirements of the equal employment opportunity program of the city of Cincinnati prescribed by ordinance and authorize the purchase, by purchase order, of the needed services, supplies, materials, construction, demolition or equipment from the lowest and best bidder as disclosed by competitive bids which may be either oral or written. A record of all emergency purchases of supplies, services and construction in excess of \$100,000 shall be reported to city council semi-annually. Furthermore, the city purchasing agent may authorize emergency purchases of \$100,000 and less without additional approval of the city manager being required to approve the nature of the emergency.

When normal procurement requirements are waived, all possible steps shall be taken to secure maximum competition in the procurement of the needed supplies, services, or construction; and any warranted follow-up in regard to the equal employment opportunity program shall be made.

A written determination of the basis for the emergency and for the selection of a particular contractor shall be included in the contract file and in the recommendation to the city manager or board or commission on purchases in excess of \$100,000.

(b) Imminent Danger.

Notwithstanding any other provision of this chapter, when there exists a disaster, or an imminent threat or danger to public health, welfare or safety requiring the direct action of a director or the commissioner of health, such director or commissioner of health may waive any advertising, formal contract, and surety requirements prescribed by statute or ordinance and the pre-award requirements of the equal employment opportunity program of the city of Cincinnati prescribed by ordinance and authorize the purchase of the needed services, supplies, materials, construction, demolition or equipment from the best bidder as disclosed by informal competitive bids which may be oral or written. If the cost is expected to exceed \$100,000, the director or the commissioner of health shall obtain the verbal approval of the city manager or the deputy city manager, or if the cost is expected to be \$100,000 or less, obtain the verbal approval of the city purchasing agent or the city purchasing agent's designee. The city purchasing agent may promulgate procedures for such emergency purchases involving imminent danger. A record of all imminent danger emergency purchases shall be reported to city council semi-annually.

(Ordained by Ord. No. 426-1992, eff. 10-23-92)

ARTICLE XXIV [MSD Rules and Regulations (Eff. March 1, 2001)]

ADMINISTRATIVE RULES

Section 2402 Administrative Rule No. 2

The City of Cincinnati will follow the Hamilton County adopted Purchasing Policy without exception when purchasing goods and services and in entering into any contracts. Any exception in following the county purchasing policy must be authorized by the Board of County Commissioners by resolution.

In the performance of sewer repair work, the District shall follow the guidelines of Section 307.86 of the Ohio Revised Code, which delineates competitive bidding requirements. In addressing those circumstances falling under paragraph (A), which outlines certain exceptions to competitive bidding requirements, the County Administrator may make a determination that a real and present emergency exists, thereby precluding the requirement for a competitive bid. The County Administrator may delegate some or all of this authority to the Director of MSD.



County of Hamilton

OFFICE OF THE

BOARD OF COMMISSIONERS JOHN & DOWLIN TOM NEYER, JR. TODO PORTUNE COUNTY ADMINISTRATOR COUNTY ADMINISTRATION BUILDING

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DAVID J. KRINGS

The Hamilton County Administrator hereby delegates to the Director of the Metropolitan Sewer District of Greater Cincinnati authority to authorize the expenditure of funds, up to \$50,000, to stabilize emergency situations under any of the following conditions:

- Where system failure would cause sewer everflows in violation of applicable federal, state and local law or rule;
- Where the health and welfare of the public would be placed in jeopardy if the time involved
 in the competitive bidding procedures were to be followed; and
- Where a natural disaster occurs that would require immediate action.

MSD will immediately take all action necessary to stabilize the situation, to resolve any dangers to the public or properties and to restore any loss of service.

Whenever action is taken under the delegation of authority and a contract of purchase, lease, or construction is exempted from competitive bidding because the estimated cost is fifteen thousand dollars or more, but less than fifty thousand dollars, MSD shall, in compliance with section 307.86 of the Ohio Revised Code, assign the work to a contractor previously selected through a unit basis competitive bid (time-and-materials bid.) MSD shall maintain pertinent records for the longer of at least one year after the contract is awarded or the amount of time the federal government requires.

The MSD Director shall notify the office of the County Administrator no later than the close of the following business day that action has been taken under the delegation of authority, and shall specify the nature of the action. The MSD Director shall submit to the County Administrator a monthly report summarizing actions taken in any month when the MSD Director exercised the emergency provisions outlined above.

At no time shall the MSD Director exceed the authority outlined under Section 307.86 (A) of the ORC.

Signed.

David J. Krings

Date